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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/764,199	01/23/2004	Larry E. Reimert	DQIP-150	8085

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EXAMINER

BEACH, THOMAS A

ART UNIT	PAPER NUMBER
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3671

DATE MAILED: 10/01/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/764,199

Applicant(s)

REIMERT, LARRY E.

Examiner

Thomas A Beach

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 15-17 is/are allowed.
- 6) ☒ Claim(s) 1-3, 11, 18-22 and 26 is/are rejected.
- 7) ☒ Claim(s) 4-10, 12-14 and 23-25 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 03/29/04
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: ____.

DETAILED ACTION

Information Disclosure Statement

1. The listing of reference US 6,471,250 in the specification is not a proper information disclosure statement for this reference. 37 CFR 1.98(b) requires a list of all patents, publications, or other information submitted for consideration by the Office, and MPEP § 609 A(1) states, "the list may not be incorporated into the specification but must be submitted in a separate paper." Therefore, unless this reference has been cited by the examiner on form PTO-892, it has not been considered.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-3 and 18-20 are rejected under 35 U.S.C. 102(b) as being anticipated by Lewis et al 3,817,281. Lewis shows a pod latchdown mechanism for latching a control pod 24 to a subsea oilfield structure having control lines 44/60 extending to a coupler component supported on a receptacle plate 14 on the subsea oilfield structure for cooperation with a coupler component supported on a lower mounting plate 25 on the control pod, the latchdown mechanism having a subsea receptacle housing 31 secured to the subsea structure for receiving the control pod 35 therein and having a latching surface 69 at an upper end of the receptacle housing (69 is considered upper

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since this opening is above the very bottom plate 19 and upper is merely relative term); a latchdown actuator 67 movably supported on the control pod; and a plurality of gripping arms 64 for engagement and disengagement with the latching surface to selectively connect and disconnect the control pod from the oilfield structure in response to movement of the latchdown actuator.

As concerns claim 2, Lewis shows the latching surface on the receptacle housing includes at least one recess the (the plurality of openings 69) in an inner surface of the receptacle housing for receiving the plurality of gripping arms.

As concerns claim 3, Lewis shows the latchdown actuator 65/67 is movable along a central axis substantially coaxially with a control pod central axis (figure 2).

As concerns claim 18, Lewis shows a pod latchdown mechanism for latching a control pod 24 to a subsea oilfield structure, the latchdown mechanism having a subsea receptacle housing 31 secured to the subsea structure for receiving the control pod therein, a latchdown actuator 67 movably supported on the control pod; and a plurality of gripping arms 64 positioned along a periphery of the control pod for selective engagement and disengagement with the receptacle housing, the plurality of gripping arms 64 being pivotally connected to the control pod such that movement of the latchdown actuator to an unlatched position produces a decoupling force between the control pod and the subsea structure greater than an unlatching force of the latchdown actuator (figures 2 and 5).

As concerns claim 19, Lewis shows the subsea receptacle housing has a cavity therein to receive the control pod extending axially over substantially the entire length of

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the control pod 24 (figure 5), the receptacle housing including an inner profile 14a to latch the control pod to the subsea structure in response to movement of the latchdown actuator with respect to the control pod.

As concerns claim 20, Lewis shows one of the control pod and the receptacle housing being provided with an axially extending slot 14a having a radial thickness sized to receive a protrusion 25a on the other of the control pod and the receptacle housing for rotationally aligning the control pod with respect to the receptacle housing prior to activating the latchdown mechanism (figure 4).

4. Claims 21, 22 and 26 are rejected under 35 U.S.C. 102(b) as being anticipated by Brun 3,551,005. Brun shows a pod latchdown mechanism for latching a control pod with a control pod 20 central axis to a subsea oilfield structure having control lines 68 extending through a receptacle plate (upper flange surface of 12) on the subsea oilfield structure 12 for cooperation with control lines 38 extending through a lower mounting plate 37 on the control pod, the latchdown mechanism having a subsea receptacle housing 24 secured to the subsea structure for receiving the control pod therein and having an interior latching surface 34 at an upper end of the receptacle housing; a latchdown actuator supported on the control pod (col. 2, lines 61-69); a plurality of gripping arms 32 positioned along a periphery of the control pod for engagement and disengagement with the latching surface to selectively connect and disconnect the control pod from the oilfield structure in response to the latchdown actuator (figures 1 and 2); and one of the control pod 20 and the receptacle housing being provided with an axially extending slot 28 having a radial thickness sized to receive a protrusion 30 on

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the other of the control pod and the receptacle housing for rotationally aligning the control pod with respect to the receptacle housing prior to activating the latchdown mechanism (col. 2, lines 70-72);.

As concerns claim 22, Brun shows the latching surface 34 on the receptacle housing includes at least one recess in an inner surface of the receptacle housing for receiving the plurality of gripping arms (figure 2).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-2, 11, 21, 22 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brun 3,551,005 in view of Van Bilderbeek 4,223,920. Brun shows a pod latchdown mechanism for latching a control pod 20 to a subsea oilfield structure 10 having control lines 68 extending to a coupler component supported on a receptacle plate (upper flange surface of 12) on the subsea oilfield structure 12 for cooperation with a coupler component 42 supported on a lower mounting plate on the control pod, the latchdown mechanism including a subsea receptacle housing 24 secured to the subsea structure for receiving the control pod therein and having a latching surface 34 at an upper end of the receptacle housing; a latchdown actuator (col. 2, lines 61-69); and a plurality of gripping arms 32 for engagement and disengagement with the latching

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surface 34 to selectively connect and disconnect the control pod from the oilfield structure in response to movement of the latchdown actuator. Brun does not disclose a latchdown actuator movably supported on the control pod; however, Van Bilderbeek show a similar pod latchdown mechanism for latching a control pod to a subsea oilfield structure having control lines and a latchdown actuator 35 movably supported on the control pod 11 and movable along a central axis substantially coaxially (claim 3) with a control pod central axis with plurality of gripping arms 60 for engagement and disengagement with the latching surface that includes hydraulically powered running tool 20 for moving the collar 36 between the latched and unlatched positions (claim 4). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Brun, as taught by Van Bilderbeek, to include a latchdown actuator movably supported on the control pod in order to provide hydraulic means that easily create a strong connection of components (col. 1, lines 26-29), especially since Brun states in column 2, lines 70-72 that actuation may be performed by any means desirable.

As concerns claim 2, the combination shows the latching surface 34 on the receptacle housing includes at least one recess (figure 1 of Brun) in an inner surface of the receptacle housing for receiving the plurality of gripping arms.

As concerns claim 11, the combination shows one of the control pod 28 and the receptacle housing being provided with an axially extending slot having a radial thickness sized to receive a protrusion 30 on the other of the control pod and the

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receptacle housing for rotationally aligning the control pod with respect to the receptacle housing prior to activating the latchdown mechanism (311).

7. Claim 26 is rejected under 35 U.S.C. 103(a) as being unpatentable over Brun 3,551,005 in view of Quigg et al 4,439,055. Brun shows the plurality of gripping arms but does not show the arms pivotally connected to the control pod such that movement of the latchdown actuator to an unlatched position produces a decoupling force between the control pod and the subsea structure greater than an unlatching force of the latchdown actuator. However, Quigg shows a plurality of gripping arms 34, latching dogs, pivotally connected to a control pod 40 such that movement of the latchdown actuator to an unlatched position produces a decoupling force between the control pod and the subsea structure greater than an unlatching force of the latchdown actuator (figures 1 and 3). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Brun, as taught by Quigg, to include gripping arms pivotally connected to a control pod in order to provide a secured connection to withstand movement of the pod due to movement of the ocean (col. 1, lines 45-50), especially since Brun states in column 2, lines 70-72 that actuation may be performed by any means desirable.

8. Applicant has claimed the combination of a latchdown mechanism and the structure of the control pod and subsea oilfield structure since the control pod and the subsea oilfield structure are positively recited in the body of the claims 1, 15, 18 and 21; although the preamble sets forth the latchdown mechanism for use with the control pod

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latching to a subsea oilfield structure, and thus a subcombination with intended use.

Since the claims are unclear, the examiner has treated these claims on the merits as the combination because the preamble structure is positively recited in the body.

Therefore, applicant should amend the claims only if the subcombination was intended in order to provide consistency.

Allowable Subject Matter

9. Claims 4-10, 12-14 and 23-25 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

10. Claims 15-17 are allowed.

Conclusion

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thomas A Beach whose telephone number is 703.305.4848. The examiner can normally be reached on Monday-Thursday, 8:00am-6:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Will can be reached on 703.308.3870. The fax phone numbers for

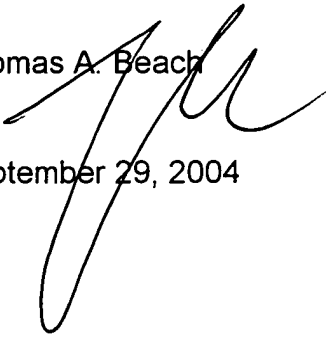
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the organization where this application or proceeding is assigned are 703.872.9306 or 703.872.9306 for regular communications and 703.872.9306 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703.306.4198.

Thomas A. Beach

September 29, 2004

A handwritten signature in black ink, appearing to read 'T. Beach', with a large, stylized loop at the bottom.